Amendments to the Abstract:

Please insert the following Abstract as a separate page after the claims.

ABSTRACT OF THE DISCLOSURE

A harvester for a forestry machine comprises grapples, a cutting device, trimming devices and advancement devices for grasping, cutting, trimming and advancement in the axial direction, respectively, of a tree stem. Further, the harvester includes a measurement device for measuring the length of the tree stem and a measurement device for measuring how the transverse dimension of the tree stem varies along its length. The measurement device includes a movable measurement device for contact-free detection of the outer contour of the tree stem, from which the diameter is calculable. The measurement device is located between the trimming device and the advancement devices for counteracting dirtying of the measurement device. A method of measuring the transverse dimension of a tree stem is disclosed in which the tree stem is moved axially past a measurement device in a harvester. The method comprises the steps that a pair of measurement devices are moved towards the tree stem, that pairs of read-off values are registered on detection of the outer contour of the tree stem and that the transverse dimension of the tree stem is calculated from each pair of read-off values. After detection of the outer contour, the measurement devices are moved a distance away from the tree stem in order thereafter to be once again moved towards the tree stem for a renewed detection of the outer contour. A read-off value which exceeds the previous read-off value is replaced by the previous read-off value before a renewed calculation of the transverse dimension.